MAY - 1 2003

## K030433

# 510(k) Summary Carl Zeiss Meditec, Incorporated STRATUSOCT<sup>TM</sup> with RNFL Normative Database

This 510(k) summary for the *STRATUS*OCT<sup>TM</sup> with RNFL Normative Database is submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

#### **GENERAL INFORMATION**

Manufacturer:

Carl Zeiss Meditec, Inc. 5160 Hacienda Drive Dublin, California 94568 (925) 557-4353 (phone) (925) 557-4481 (fax) Est. Reg. No. 2918630

**Contact Person:** 

R. Michael Crompton

Vice President, Regulatory / Clinical Affairs

and Quality Assurance

**DEVICE DESCRIPTION** 

Classification:

Class II

**Trade Name:** 

STRATUSOCT™ with Retinal Nerve Fiber Layer Normative Database

Generic/Common Name:

Ophthalmoscope (21 CFR § 886.1570)

Ultrasonic pulsed echo imaging system (21 CFR § 892.1560)

#### PREDICATE DEVICE

(1) Humphrey® OCT 3 (K012727)

#### **INTENDED USE**

The STRATUSOCT<sup>TM</sup> is a high resolution tomographic device for the viewing and axial cross sectional imaging of posterior ocular structures. It is used for *in vivo* imaging and measurement of the retina, retinal nerve fiber layer, and optic disk. It is intended for use as a diagnostic device to aid in the detection and management of ocular diseases, including but not limited to macular edema, central serous retinopathy, and glaucoma. The STRATUSOCT<sup>TM</sup> with Retinal Nerve Fiber Layer ("RNFL") Normative Database is a quantitative tool for the comparison of retinal nerve fiber layer in the human retina to a database of known normal subjects. The RNFL Normative Database is intended for use as a diagnostic aid in the detection and management of ocular diseases, especially glaucoma.

#### **DEVICE DESCRIPTION**

The STRATUSOCT<sup>TM</sup> with RNFL Normative Database is a microprocessor-based low-coherence digital intrument employing low coherence interferometry to generate images of internal ocular tissue microstructures. The device measures optical reflections or backscatter from tissue using a scanning optical beam. Results obtained for Retinal Nerve Fiber Layer can be compared to a database of known normal human subjects.

#### SUBSTANTIAL EQUIVALENCE

The *STRATUS*OCT<sup>TM</sup> with Retinal Nerve Fiber Layer ("RNFL") Normative Database is substantially equivalent to the predicate device identified previously. The *STRATUS*OCT<sup>TM</sup> with RNFL Normative Database is substantially equivalent to the predicate device with regard to intended use, operating principle, function, and materials.

Clinical evaluation performed on the *STRATUS*oct<sup>TM</sup> with RNFL Normative Database supports the expanded indications for use statement and demonstrates the device is substantially equivalent to the predicate device and does not raise new questions regarding safety and effectiveness with respect to ophthalmoscopes and ultrasonic pulsed echo imaging systems.

#### **CLINICAL EVALUATION**

Clinical data was collected on a statistically significant number of normal human subjects and analyzed to support the inclusion of the RNFL Normative Database on the *STRATUS*OCT<sup>TM</sup>.

### **CONCLUSION**

As described in this 510(k) Summary, all testing deemed necessary was conducted on the *STRATUS*OCT<sup>TM</sup> with RNFL Normative Database to ensure that the device is safe and effective for its intended use when used in accordance with its Instructions for Use.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

MAY = 1 2003

Mr. R. Michael Crompton Vice President, Regulatory/Clinical Affairs and Quality Assurance Carl Zeiss Meditec, Inc. 5160 Hacienda Drive Dublin, CA 94568-7562

Re: K030433

Trade/Device Name: STRATUSoct™ with Retinal Nerve Fiber Layer ("RNFL")

Normative Database

Regulation Number: 21 CFR 892.1560; 886.1570

Regulation Name: Ultrasonic pulsed echo imaging system and Ophthalmoscope

Regulatory Class: Class II Product Code: IYO; HLI Dated: February 7, 2003

Received: February 10, 2003

## Dear Mr. Crompton:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4613. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <a href="http://www.fda.gov/cdrh/dsma/dsmamain.html">http://www.fda.gov/cdrh/dsma/dsmamain.html</a>

Sincerely yours,

A. Ralph Rosenthal, M.D.

Director

Division of Ophthalmic and Ear,

Palpi Korenthal

Nose and Throat Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

## Statement of Indications for Use

510(k) Number (if known): K 030433

Device Name: <u>STRATUSOCT™ with RNFL Normative Database</u>

Indications for Use: The *STRATUS*OCT™ is a high resolution tomographic device for the viewing and axial cross sectional imaging of posterior ocular structures. It is used for in vivo imaging and measurement of the retina, retinal nerve fiber layer, and optic disk. It is intended for use as a diagnostic device to aid in the detection and management of ocular diseases, including but not limited to macular edema, central serous retinopathy, and glaucoma. The *STRATUS*OCT™ with Retinal Nerve Fiber Layer ("RNFL") Normative Database is a quantitative tool for the comparison of retinal nerve fiber layer in the human retina to a database of known normal subjects. The RNFL Normative Database is intended for use as a diagnostic aid in the detection and management of ocular diseases, especially glaucoma.

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Concurrence of CDRH, Office of Device Evaluation (ODE) (Division Sign-Off) Division of Ophthalmic Ear, Nose and Throat Devises			
510(k) Number <u>K03043 3</u>			
Prescription Use_ (Per 21 C.F.R. § 80:	1.109)	OR	Over-the-Counter Use